

## United States Department of the Interior

FISH AND WILDLIFE SERVICE 1011 E. Tudor Rd. Anchorage, Alaska 99503-6199

AFES/MMM

1/23/07.

Mr. Rick Trupp Permits Coordinator Veritas DGC Land 2000 E. 88<sup>th</sup> Ave. Anchorage, Alaska 99507

Dear Mr. Trupp:

This responds to the letter Kuukpik/Veritas (Veritas) submitted to the U.S. Fish and Wildlife Service (USFWS) dated November 13, 2006 requesting a Letter of Authorization for the incidental and intentional take of polar bears for up to five seismic programs for oil and gas exploration.

Enclosed is a LOA (06-18), with exceptions noted, that authorizes Veritas to take small numbers of polar bears incidental to oil and gas industry exploration activities at the locations identified in your LOA request that are within the geographical region of the Beaufort Sea Incidental Take Regulations (ITRs). This incidental take authorization is issued in accordance with our regulations listed at 71 FR 43926, dated August 2, 2006. This authorization excludes southern portions of your West and East Operations Area from coverage for incidental take since these areas are beyond the geographic region of the ITRs. We do not anticipate polar bears to be encountered this far inland. In addition, the northwestern portion of your West Operations Area, located north of Atqasuk, is also beyond the geographic region of the ITRs and we will not be able to authorize incidental take in these area should they occur. The development of ITRs for the Chukchi Sea region are pending. We are also continuing a review of the "North Shore #D" area and will develop a separate LOA for this area based on the presence of known polar bear dens.

Veritas will conduct operations within the survey area depicted on the confidential map provided by your office in the November 13, 2006 request to the Fish and Wildlife Service. Activities will occur in five defined areas, "Ikipikpuk 2D/3D" within NW-NPRA and "Happy Valley 2D," "White Hills 2D," North Shore 3D," and "Big Island 2D/3D" within NE-NPRA. These activities are discussed in detail in the Veritas, "Plan of Operations; 2007 Winter Seismic Survey; North Slope, Alaska NW-NPRA, NE-NPRA/state lands and waters." Activities also include on-ice reconnaissance trips, both aerial and on-ice as described in Scott Nish's emails dated December 28 and 29, 2006. If additional seismic prospects outside of the area previously identified are

28 and 29, 2006. If additional seismic prospects outside of the area previously identified are developed during the 2006-2007 winter season you are requested to notify the Marine Mammals Management office of their locations prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, to amend your LOA.

In response to you request, this LOA will be limited to these defined areas, with the previously noted exception of the North Shore 3D area. Although this area is within the geographic region of the ITRs, there are at least four, or five known polar bear dens in this area. Increased monitoring and mitigation measures and options to minimize the impact of industrial activities are under consideration for this area, including one-mile exclusion zones around each known den (see attached map). We are currently in discussion with your company and your client to establish mitigation measures to avoid denning bears. Once mitigation measures have been established for the North Shore 3D area the USFWS will amend the current authorization to include the North Shore 3D area.

Historical polar bear denning activity reveals that polar bear denning habitat occurs along creek cutbanks and river bluffs. For example, approximately 1782 miles (2870 km) of potential polar bear denning habitat is located between the Colville River and the Canning River alone. Disturbance during denning could lead to abandonment of dens and possible mortality to cubs. Seismic vibroseis activities occurring in these areas near preferred denning habitat may encounter denning polar bears. The USFWS seeks to limit disturbance to maternal polar bear den sites, both known dens and those areas that could possibly be preferred by denning polar bears. With this in mind, use caution when operating near these areas during the maternal denning period (mid November to mid April). Furthermore, Veritas will provide copies of the polar bear observation form to all Veritas contractors operating under the LOA. Report any polar bear sightings, signs to this office by phone, FAX, or email using the polar bear observation form. Report any possible den locations that are found during work activities immediately to our office.

Furthermore, the U.S. Geological Survey has posted information regarding polar bear denning habitat the polar bear den habitat GIS coverage for downloading from the Alaska Science Center (ASC) website, plus associated documents. The den habitat map (ARC/INFO export file), the mapping manuscript (PDF file) and a picture of den habitat (JPG file) are now available on the ASC website (<a href="http://www.absc.usgs.gov/dataproducts.htm">http://www.absc.usgs.gov/dataproducts.htm</a>). Use these resources when planning activities in potential denning areas and contact us immediately if any dens are found during your activities. USFWS biologists are also available for consultation if questions or concerns arise during the project period at the phone numbers listed below and noted in your interaction plan.

In addition, this letter includes a harassment authorization (attached), for Veritas and its representatives to take polar bears by harassment (deterrent activities) for the protection of both human life and polar bears while conducting activities in polar bear habitat for all 2007 Winter Seismic Survey areas. This authorization is issued specifically to Veritas employees who are responsible for ensuring that trained and qualified personnel are assigned the task to harass

(deter) polar bears. It is the responsibility of Veritas personnel to report all polar bear harassment events to our Marine Mammals Management Office within 24 hours. This authorization is effective for the period, date of issuance to May 31, 2007. Intentional take is authorized under sections 101 (a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act.

If a polar bear interaction escalates into a life threatening situation, Section 101(c) of the MMPA allows, without specific authorization, the take (including lethal take) of a polar bear if such taking is imminently necessary in self-defense or to save the life of a person in immediate danger, and such taking is reported to the USFWS, Marine Mammal Management Office within 24 hours.

Please review these regulations. Should you have any further questions contact Mr. Craig Perham of our Marine Mammals Management Office at (907) 786-3800 or 786-3810.

Sincerely,

Rosa Meehan, Ph.D.

Chief, Marine Mammals Management

Enclosure

cc: Mr. Richard Shideler, ADF&G

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**FFWFO** 



## United States Department of the Interior

FISH AND WILDLIFE SERVICE 1011 E. Tudor Rd. Anchorage, Alaska 99503-6199

MMM

ISSUED: January 20, 200 7 EXPIRES: May 31, 2007

# LETTER OF AUTHORIZATION (06-18)

Kuukpik/Veritas (Veritas) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2007 Winter Seismic Survey Program. Activities will occur in five defined areas, "Ikipikpuk 2D/3D" within NW-NPRA and "Happy Valley 2D," "White Hills 2D," North Shore 3D," and "Big Island 2D/3D" within NE-NPRA. These activities are discussed in detail in the, "Plan of Operations; 2007 Winter Seismic Survey," sent in with you application packet. Activities also include on-ice reconnaissance trips, both aerial and on-ice as described in Scott Nish's emails dated December 28 and 29, 2006.

The LOA is valid from the date of issuance to May 31, 2007, or the close of tundra travel for the winter season of 2006-07, whichever comes first. This authorization and the required conditions below include contractors of Veritas performing Veritas-approved work under the scope of operations to be conducted. Authorization is subject to the following conditions:

- 1. The documents, "Appendix 1 Field Operating Procedure, Polar Bear Protocol" and "Appendix 2 Polar Bear Awareness and Interaction Plan" are approved and all provisions are incorporated by reference as conditions of this authorization and must be complied with unless specifically noted otherwise in this Letter of Authorization. A copy of this polar bear interaction plan must be available on site for all personnel.
- 2. Veritas Operations Managers, or their designates, must be fully aware, understand, and capable of implementing the conditions of this authorization.
- 3. Intentional take is prohibited under this authorization.
- 4. This authorization is valid only for those activities identified in the request for a Letter of Authorization dated November 13, 2006 that are located within the geographical region of the Beaufort Sea Incidental Take Regulations. This will exclude the northwestern portion of your Western Operations Area north of Atqasuk and southern portions of your West and East Operations Area from

- coverage for incidental take. Veritas will be responsible for any takes that occur outside the geographic region of the Beaufort Sea Incidental Take Regulations.
- 5. Polar bear monitoring, reporting, and survey activities must be conducted in accordance with 50 CFR section 18.128. In addition, Veritas must comply with the following monitoring, mitigation, and reporting requirements:
  - Veritas must cooperate with the Fish and Wildlife Service (Service), and other designated Federal, State, or local agencies to monitor the impacts of oil and gas exploration activities on polar bears;
  - Veritas must not conduct activities that operate nor pass within 1 mile of known polar bear dens, and all observed dens must be reported to the Marine Mammals Management Office, Fish and Wildlife Service immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and Service must be contacted for guidance. The Service will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential actions may range from cessation or modification of work to conducting additional monitoring, and Veritas must comply with any additional measures specified.
  - Veritas must designate a qualified individual or individuals to observe, record, and report the effects of the activity on polar bears to the Service within 24 hours of visual observation.
  - Every polar bear observed will be recorded on a Polar Bear Observation Form. Information within the observation report will include, but is not limited to:
    - 1. Date
    - 2. Time
    - 3. Observer name
    - 4. Contact number/email
    - 5. Location, with latitude, longitude, and datum, if applicable
    - 6. Weather conditions at time of observation
    - 7. Temperature
    - 8. Visibility
    - 9. Number of bears: sex and age
    - 10. Estimated closest point of bears from personnel and facilities
    - 11. Possible attractants present
    - 12. Bear behavior
    - 13. A description of the encounter

- 14. Duration of the encounter
- 15. Type of Deterrents used and distance from bear when used
- 16. Agency/Contacts
- Evidence of polar bears, such as tracks, carcass, or dens, will also be reported.;
- at the discretion of the Fish and Wildlife Service, Veritas must allow the Fish and Wildlife Service to place an observer on the site to monitor the impacts of the activity on polar bears;
- Veritas must submit an annual monitoring report to the Marine Mammals Management Office as required under 18 CFR 18.128(f), which will be received by August 31, 2007.
- 6. This LOA (06-18) will not initially include the North Shore 3D area. There are at least four, but possibly five known polar bear dens in this area. Increased mitigation measures to minimize the impact of industrial activities will be implemented in this area prior to its inclusion in this authorization. One mitigation measure will be the establishment of one mile exclusion zones around each known den (see attached map) from 1 January 2007 to 15 April 2007. Once mitigation measures have been established for the North Shore 3D area the USFWS will amend the current authorization to include the North Shore 3D area.
- 7. With respect to the Service-required Plan of Cooperation regarding potential impact of Veritas's operations to subsistence hunting of polar bears; this LOA will be fully operational when the Service receives documentation that potential polar bear subsistence issues and concerns have been addressed by Veritas at meetings in Barrow, Atqasuk and Nuiqsut (currently scheduled between December 2006 and January 2007).
- 8. This authorization expires May 31, 2007 or the close of tundra travel for the winter season of 2006-07, whichever comes first.

Chief, Marine Mammals Management

Date



## United States Department of the Interior

FISH AND WILDLIFE SERVICE 1011 E. Tudor Rd. Anchorage, Alaska 99503-6199

AFES/MMM

#### U.S. Fish and Wildlife Service

#### AUTHORIZATION TO TAKE, BY HARASSMENT, POLAR BEARS

ISSUED: January 15, 200**% 7** EXPIRES: May 31, 2007

Under Sections 101 (a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act of 1972, as amended, Kuukpik/Veritas (Veritas) is authorized to take, by harassment, polar bears during exploration activities in association with the 2007 Winter Seismic Survey Program. Activities will occur in five defined areas, "Ikipikpuk 2D/3D" within NW-NPRA and "Happy Valley 2D," "White Hills 2D," North Shore 3D," and "Big Island 2D/3D" within NE-NPRA. These activities are discussed in detail in the, "Plan of Operations; 2007 Winter Seismic Survey," sent in with you application packet. Activities also include on-ice reconnaissance trips, both aerial and on-ice as described in Scott Nish's emails dated December 28 and 29, 2006.

The purpose of authorizing taking by harassment, or deterrence, is to maintain human and bear safety and welfare in the North Slope oilfields. Authorizing Level B harassment take reduces the likelihood of death or injury of polar bears. This is accomplished by the following objectives:

- 1. Prevent bears from associating food with humans and facilities
- 2. "Train" bears to avoid people
- 3. Allow bears to use travel routes (natural and man-made) to move along the coast
- 4. Prevent bears from extended use of areas around facilities
- 5. Prevent bears from entering the developed parts of the oilfield

#### Harassment authorization is subject to the following conditions:

- 1. The polar bear interaction plan ("Appendix 1 Field Operating Procedure, Polar Bear Protocol" and "Appendix 2 Polar Bear Awareness and Interaction Plan") is approved and all provisions, unless noted specifically, are incorporated into this Letter of Authorization by reference. A copy of the polar bear interaction plan must be available on site for all personnel.
- 2. Veritas Operations Managers, or their designates, must be fully aware, understand, and capable of implementing the conditions of this authorization.

- 3. This authorization is restricted to harassment activities.
- 4. Authorized individuals are responsible for documenting and reporting to the U.S. Fish and Wildlife Service, Marine Mammals Management Office, (907) 786-3800, all instances involving harassment activities as soon as possible and not later than 24 hours after the occurrence.
- 5. Activities will not operate nor pass within 1 mile of known polar bear dens, and all observed dens will be reported to the Marine Mammals Management Office, Fish and Wildlife Service immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and Service will be contacted for guidance. The Service will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential responses may range from cessation or modification of work to conducting additional monitoring.
  - 6. A final report of all encounters and hazing events must be submitted to the U.S. Fish and Wildlife Service, Marine Mammals Management Office within 60 days from the expiration date of this authorization.
  - 7. Hazing techniques must not cause the injury or death of a bear. Types of hazing techniques may include, but are not limited to:
    - Bear Monitors
    - Air horns
    - Electric fences
    - Chemical repellents
    - Acoustic recordings
    - Vehicles
    - Projectiles: cracker shells, bean bags, rubber bullets, screamers, etc.
  - 8. Prior to conducting a harassment activity, operators must:
    - Reduce/eliminate attractants
    - Secure site; notify supervisor; move personnel to safety
    - Ensure bear has escape route(s)
    - Ensure communication with all personnel
  - 9. When conducting a harassment activity, operators must:
    - Chose the method that will have the least effect on the bear and increase the intensity of the method or use additional methods only if necessary
    - Shout at the bear before using projectile (avoidance conditioning)
    - Move bear in proper direction; continue with minimally necessary deterrents to receive desired result

- 10. After a harassment event has occurred, operators must:
  - Monitor bear movement (to ensure no return)
  - Notify supervisor and personnel to resume work
  - Fill out report to be sent to the Service as required under condition 4 (within 24 hours)

11. This Authorization is valid for the period indicated on this authorization, unless extended or terminated in writing by the U.S. Fish and Wildlife Service, Marine Mammals Management Office.

Signed:

Date:

